



INTERPRETIVE COMMENTS: Large lungworms (Dictyocaulus viviparus) present in low to moderate numbers in four deer including one deer (No. 1) with sufficient number of parasites to be of concern. Large lungworms and protostrongylid larvae, probably from muscleworms (P. andersoni), associated with mild to moderate lung damage (peribronchitis, bronchitis, pleuritis, pneumonitis) in all animals. Abomasal parasites (Mazamastrongylus odocoilei, M. pурсglovei, Ostertagia dikmansi, O. mossi, and Trichostrongylus askivali) at a moderate level (APC = 1,100) indicating a high probability that the herd is near nutritional carrying capacity. Mild inflammation of the abomasal mucosa (abomasitis) due to abomasal worms present in one deer. Gullet worms (Gongylonema pulchrum) present but not considered pathogenic at the low level encountered. Blood protozoans (Trypanosoma cervi and/or Theileria cervi) present in all deer with the latter considered a stressor only in malnourished, heavily parasitized hosts. Arthropod parasites at levels commonly found on white-tailed deer in the southeastern United States. Insect-induced lesions (dermatitis) were evident in one deer. Nonspecific inflammation of the abdominal cavity (peritonitis) often associated with parasitism was noted in two animals.

Physical condition ratings, kidney fat indices, body weights, and hematologic values were all within normal ranges with body weight being above average for most southeastern deer herds. In addition to lesions attributable to parasitism (noted above), pathologic studies disclosed a mild bacterial inflammation of the mammary gland (mastitis) in one deer due to infection with bacteria in the genus Staphylococcus. Serologic tests for antibodies to selected infectious diseases were uniformly negative except for one suspicious reaction to EHD virus suggesting minimal activity by these etiologic agents. EHD virus is the cause of hemorrhagic disease which is the most significant infectious disease problem among deer.

An overview is as follows: 1) based on APC data the herd is near nutritional carrying capacity; 2) the levels of important pathogenic parasites were below levels considered sufficient to produce mortality; 3) pathologic studies did not disclose evidence of significant deterioration of herd health; 4) there has been minimal activity by important infectious disease agents; and 5) the overall health status of the population is appears reasonably good. Based on these findings, this herd can be maintained near its present density without undue risk of disease related mortality or declines in herd health. A significant increase in herd density can be expected to be accompanied by increased lungworm problems and declines in herd health.

Table 2. Results of serologic tests for selected diseases in five white-tailed deer from Panther Swamp National Wildlife Refuge, Yazoo County, Mississippi, on July 24, 1991.

Disease	Deer Number				
	1	2	3	4	5
Leptospirosis					
(serotype <u>pomona</u> )	Neg	Neg	Neg	Neg	Neg
(serotype <u>hardjo</u> )	Neg	Neg	Neg	Neg	Neg
(serotype <u>grippotyphosa</u> )	Neg	Neg	Neg	Neg	Neg
(serotype <u>icterohemorrhagiae</u> )	Neg	Neg	Neg	Neg	Neg
(serotype <u>canicola</u> )	Neg	Neg	Neg	Neg	Neg
(serotype <u>bratislava</u> )	Neg	Neg	Neg	Neg	Neg
Brucellosis	Neg	Neg	Neg	Neg	Neg
Anaplasmosis	Neg	Neg	Neg	Neg	Neg
Infectious bovine rhinotracheitis (IBR)	Neg	Neg	Neg	Neg	Neg
Bovine virus diarrhea (BVD)	Neg	Neg	Neg	Neg	Neg
Parainfluenza <sub>3</sub> (PI <sub>3</sub> )	Neg	Neg	Neg	Neg	Neg
Epizootic hemorrhagic disease (EHD)	Neg	Neg	Sus	Neg	Neg
Bluetongue (BT)	Neg	Neg	Neg	Neg	Neg
Vesicular stomatitis virus (VSV-NJ)	Neg	Neg	Neg	Neg	Neg
Vesicular stomatitis virus (VSV-Ind)	Neg	Neg	Neg	Neg	Neg

Table 3. Lesions and pathologic conditions in five white-tailed deer collected from Panther Swamp National Wildlife Refuge, Yazoo County, Mississippi, on July 24, 1991.

Lesion/Condition	Deer Number				
	1	2	3	4	5
Peribronchitis/bronchitis	1	2	1	1	1
Pleuritis	1	2	1	1	1
Pneumonitis	-	2	-	-	-
Parasitic abomasitis	-	-	1	-	-
Fibrinous peritonitis	-	-	1	-	1
Insect-bite dermatitis	-	1	-	-	-
Multifocal mastitis	-	1	-	-	-

\*Key: - = lesion or condition not present; 1 = minor tissue damage or mild pathologic change; 2 = moderate tissue damage or moderate pathologic change; 3 = extensive tissue damage or marked pathologic change.